Application No.: 10/618788 Docket No.: 11885-00014-US

REMARKS

The present application has been carefully studied and amended in view of the outstanding Office Action dated March 18, 2005, and reconsideration of that Action is requested in view of the following comments.

A petition for a three-month extension of time accompanies this response together with the appropriate fee. Accordingly, the deadline for responding to the Office Action has been extended until September 18, 2005, and this response is therefore timely filed since it was deposited in the mail for First Class Delivery Service on the date certified on the front page hereof.

Introduction

Status of claims

Claims 1 through 10 have been examined on the merits.

Claims 1 to 10 are pending.

Claims 1, 3, 6, 7, and 9 have been amended.

Support for amended Claim 1 can be found at page 3, lines 26 to 30, and page 4, lines 24 to 26 (hydroxy compounds Ca), and in page 6, lines 25 to 31 where it is stated that the mass fraction (w_c) of hydroxyurethanes C in the sum of masses of condensation product AB (m_{AB}) and hydroxyurethane C (m_c) is from 5 % to 40 %, with preferred ranges of from 10 % to 35 %, and 15 % to 30 %, according to the equation

$$w_{\rm C} = m_{\rm C} / (m_{\rm AB} + m_{\rm C}).$$

The ranges of from 10 % to 40 % have been combined to the limitation recited in amended claim 1.

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Support for amended claim 7 can be found in the same location, where the lower limit of 15 % has been combined with the upper limit of 35 %.

Support for amended claim 3 can be found in page 3, lines 25 and 26 of the specification where it is said that preference is given to dihydroxy compounds **Ca**.

Claim 6 has been amended by replacing "obtainable" by "obtained", in order to comply with USPTO practice, as is outlined in the decisions recited by the Examiner.

Claim 9 has been amended by deleting the "where appropriate" clauses.

No new matter has therefore been introduced, and entry of the amended claims is respectfully requested.

The Office Action

Rejection under 35 U. S. C. § 112

Claims 6 and 9 have been rejected under 35 U. S. C. 112, second paragraph, as being indefinite for not particularly pointing out and distinctly claim the subject matter which applicants regard as the invention.

It is believed that by virtue of the amendments made to these claims, all objections under 35 U. S. C. 112, second paragraph have been rendered moot.

Rejection under 35 U. S. C. 102 (b)

Claims 1 to 10 have also been rejected under 35 U. S. C. 102 (b) as being anticipated by US Publication No. 2002/0077389 A1 to Dworak et al ("Dworak").

Dworak, in US Publication No. 2002/0077389 A1, teaches aqueous binder mixtures comprising condensation products of hydroxyl group-containing resins **B** and water-soluble or water-dispersible resins **A** having acid groups. As resins **B**, hydroxyl group-containing polyurethane resins may be used.

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It is stated in the specification of this publication that the **mass** ratio of A:B is from 10:90 to 80:20.

This broad mass ratio takes into account the fact that these resins have different ranges for the ratio of amount of substance of functional groups (hydroxyl and acid groups) to the mass of the said resin, which is here expressed as hydroxyl number (mass of potassium hydroxide in mg having the same amount of substance of hydroxyl groups as 1 g of the resin), and acid number (mass of potassium hydroxide in mg needed to neutralise 1 g of the resin). As the acid number range for **A** is from 100 mg/g to 230 mg/g ([0012], second line), and the hydroxyl number range for **B** is from 50 mg/g to 500 mg/g ([0012), lines 3 and 4], the mass range to provide the needed balance between hydroxyl and acid groups needs to be broad. During the condensation reaction, there is only a small amount of resins **A** and **B** left unreacted, i. e. less than 5 % of their initial mass for each of **A** and **B**.

Amended claim 1 now calls for a mass fraction of **C** of at least 10 %, in the sum of masses of the condensation product **AB** and hydroxy urethane **C**. This is clearly outside the range that might have been provided by any unreacted leftovers of **B** in the mixture of the Dworak reference.

Amended Claim 1 does also not read on the condensation products **AB** of Dworak as these invariably comprise acid groups. See [0015] where their acid number is stated as being in the range of from 25 mg/g to 75 mg/g. Per the amendment, claim 1 is now restricted to such hydroxyurethanes which are made by reacting the compounds **Ca** and **Cb**, neither of which comprises acid groups. The definition of component **C** per amended claim 1 does therefore not read on the reaction products **AB**.

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Claims 2 to 10 all depend on claim 1, and are therefore also not anticipated by

Dworak.

Therefore, Claim 1 as now amended is not anticipated by Dworak.

Dworak also does not render obvious the subject matter recited in claims 1-10.

As can be seen from the stone chip resistance tests (cf. table 4), paints 4 and 5 based

on binders without the addition of the hydroxyurethane C show poor stone chip

resistance, while those with added component C (paints 1, 2, and 3) have good stone

chip resistance. Such result is unsuggested and could not have been expected from

Dworak.

It is therefore deemed that the present invention as now particularly pointed out

and distinctly claimed in amended claim 1 and the remaining dependent claims is

neither anticipated nor rendered obvious by the cited art, and favorable reconsideration

is respectfully requested.

Accordingly, for the reasons discussed above it is believed that the present

application is in condition for allowance and early notice to that effect is respectfully

requested.

Respectfully submitted,

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